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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,963	05/02/2001	Jason Seung-Min Kim	2100653.991380	7268
27498	7590	04/04/2006	EXAMINER	
PILLSBURY WINTHROP SHAW PITTMAN LLP			HSU, ALPUS	
P.O. BOX 10500			ART UNIT	
MCLEAN, VA 22102			PAPER NUMBER	
			2616	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/847,963

Applicant(s)

KIM, JASON SEUNG-MIN

Examiner

Alpus H. Hsu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

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1. In the specification, page 4, lines 12-14, the applicant is requested to provide the information regarding the serial no., title, inventor, filing date and update the status from time to time for the listed related co-pending application.

2. Claims 29-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 29, line 4, "the electronic device" lacks antecedent basis; line 12, it is unclear as to what "appropriate" means or is referring to.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 3, 7-11, 16, 18, 21-29, and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by ZIMMERMAN et al. in U.S. Patent No. 6,016,523, hereinafter referred as ZIMMERMAN.

Referring to claims 1, 3, 7-11, 16, 18, 21-28, ZIMMERMAN discloses an electronic device (2) having a configurable port (4) for connecting with a variety of interface device types (not shown), comprising a register set (6, 8 and 10) or means for storing one or more sets of configuration data providing each set of configuration data corresponding to a particular interface type that may be connected to the electronic device ; and a multiplexer (20, 22 and 24) or means for conforming a data signal in accordance with the configuration data associated with a particular interface device type connected to the electronic device.

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Referring to claims 29 and 34, ZIMMERMAN discloses a method for configuring a port connected with a variety of interface device types, by storing one or more sets of configuration data, providing each set of configuration data corresponding to a particular interface type that may be connected to an electronic device ; conforming a data signal in accordance with the configuration data associated with a particular interface device type connected to the electronic device, in response to enabling the port to transmit data to the connected device, conforming an output data signal in accordance with the configuration data associated with the particular interface type connected to the electronic device; and , in response to enabling the port to receive data from the connected device, receiving an input data signal and translating the input data signal as appropriate data signal to interface with the port (col. 2, lines 1-47, col. 4, lines 26-67, and Figure 3).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 17 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZIMMERMAN et al. in U.S. Patent No. 6,016,523, hereinafter referred as ZIMMERMAN, in view of SHIMURA in U.S. Patent No. 6,499,069.

Referring to claims 2, 17 and 30, ZIMMERMAN differs from the claims, in that, it fails to disclose the specific interface device types including open drain interface type, open collector interface type, totem pole interface type, and tri-state buffer interface type, which is well known in the art and commonly used in communications network for appropriate connection with

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external devices. SHIMURA, for example, from the similar field of endeavor, teaches the uses of specific interface device types including open drain interface type, open collector interface type, totem pole interface type, and tri-state buffer interface type (see abstract), which can be easily adopted by one of ordinary skill in the art into the device or method of ZIMMERMAN, to further improve the system capability for flexibility and adaptability.

7. Claims 4-6, 12-15, 19, 20, 31-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over ZIMMERMAN et al. in U.S. Patent No. 6,016,523, hereinafter referred as ZIMMERMAN, in view of HIGUCHI et al., hereinafter referred as HIGUCHI.

Referring to claims 4-6, 12-15, 19, 20, 31-33, ZIMMERMAN differs from the claims, in that, it fails to disclose the specific programmable registers being D-type flip-flops for configuring and enabling signaling for the configurable port of the electronic device, and controlling input and output signaling for the configurable port, which as also well known in the art and commonly used in programmable logic device for signaling and control purposes.

HIGUCHI, for example, from the similar field of endeavor, teaches the uses of specific programmable registers being D-type flip-flops for configuring and enabling signaling for the configurable port of the electronic device, and controlling input and output signaling for the configurable port (see col. 4, lines 22-29), which can be easily adopted by one of ordinary skill in the art to implement into the device or method of ZIMMERMAN, to further improve the system controllability.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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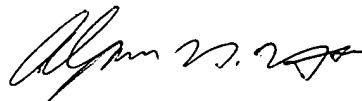
Latif et al., Wells et al., Collins, Jolley et al., Beard et al. and Craft et al. are all cited to show the common feature of programmable input/output (I/O) controller utilizing configurable port for coupling multiple peripheral devices similar to the claimed invention.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alpus H. Hsu whose telephone number is (571)272-3146. The examiner can normally be reached on M-F (5:30-3:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on (571)272-3134. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHH



Alpus H. Hsu
Primary Examiner
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